

# Rock River Turbidity and Fecal Coliform Reduction



#### Clean Water Funds: 2011

Clean Water Grant	\$46,128.90
Leveraged Funds*	\$35,632.01
Total Project Budget	\$81,760.91

<sup>\*</sup> Leveraged Funds include required 25% local match

#### **Targeted Water:**

Rock River

#### **Project Sponsor:**

Rock LMO/SWCD

#### **Partners:**

US Fish & Wildlife Service, MN DNR, Southwest Prairie TSA, and Local Landowners

#### **Grant Period:**

January 2011 - December 2012

#### **Project Contact:**

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#### **Project Narrative**

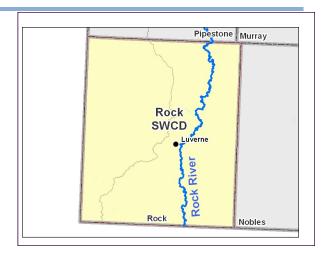
The Rock River is classified as impaired for bacteria and turbidity by the EPA. Local citizens and farmers assisted in writing an implementation plan that lists stream bank stabilization and city storm water management as priority implementation strategies to address these impairments.

Two stream bank projects will eliminate eroding stream bank erosion from 5' to 15' of vertical stream banks along 1600' of the Rock River. Rock j-hooks will be installed to divert the energy of the stream back to the center and then the banks will be back sloped and hydro seeded to stabilize the banks.

Three rain gardens will be installed to filter out bacteria and sediment from parking lots and roofs along with other pollutants while retaining storm water on the landscape. This slowing in the delivery of storm water to the Rock River will reduce stream bank erosion by reducing stream loading during storm events. These rain gardens are built by excavating 2-3 feet of soil and replacing it with a sand/compost mix that creates a "sponge" to soak up and slowly release storm water. The gardens also become a visually pleasing planting that attract butterflies and birds.

#### **Actual Outcomes**

This project resulted in 3 stream bank stabilization projects for approx. 1,389 feet of shoreline being restored resulting in an estimated 2,612.96 pounds of phosphorus and 2,612.96 tons of sediment from entering the Rock River each year. This project also resulted in 3 rain gardens being installed within the City of Luverne resulting in an estimated 291 pounds of phosphorus, and .52 tons of sediment from entering the Rock River.





### Streambank Stabilization in Progress

## **Rock River Turbidity and Fecal Coliform Reduction**



Finished Stabilization



Rain Garden Installation